



WHAT IS CLAIMED IS:

1. An apparatus that amplifies vibrations that are produced by an actuator, comprising;
 - a. a horn that forms two or more parallel acoustic paths and possesses two surfaces perpendicular to the extension, one connected directly to an actuator for mechanical input power and the other free for mechanical power output,
 - b. a horn with at least one change in direction that amplifies the vibration strain from an actuator.
2. The horn of claim 1, where the folded horn is configured axis-symmetric or planar with respect to axis of extension.
3. The horn of claim 1, further comprising of a stack of piezoelectric or electrostrictive elements that are configured concentric and external to the horn.
4. The horn of claim 1, comprised of an electroactive stack that is encircled by the horn as a compact modality of the actuator.
5. The horn of claim 1, comprised of a hollow core as a passage for transfer of materials from one side to the other.
6. The folded horn of claim 2, further comprising an adjustable fold thickness design for adjusting the bending contribution to the overall extension.
7. The folded horn of claim 2, further comprising of a reflector connected to the base of the folds for enhanced vibration amplification and control of the phase of the strain.